

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventors: Rouau et al.

Docket No.: 14923.0017

PCT Filing Date : July 16, 1998

Issued: August 16, 2005

Application Serial No.: 09/462,911

Patent No.: 6,929,936 B1

For: *Composition Comprising An Enzyme Having Galactose Oxidase Activity And Use Thereof*

ATTN: Certificate of Correction Branch  
United States Patent and Trademark Office  
Customer Service Window  
Randolph Building  
401 Dulany Street  
Alexandria, VA 22314

Certificate  
DEC 09 2005  
of Correction

**REQUEST FOR EXPEDITED ISSUANCE OF CERTIFICATE OF CORRECTION**  
**PURSUANT TO 37 C.F.R. 1.322**

Sir:

Applicants respectfully request that a Certificate of Correction be issued to correct typographical errors in claims 1 and 9 of the above-mentioned patent. The typographical errors was incurred by the U.S. Patent and Trademark Office. Applicants herein submit a copy of the previously pending claims in a Response to the Final Action filed December 6, 2004, the Notice of Allowability and Examiner's Amendment mailed March 2, 2005 and a Supplemental Examiner's Amendment mailed May 13, 2005. The Examiner's Amendment and Supplemental Amendment to claims 1 and 9 were not published in the above-mentioned patent. A Certificate of Correction form, PTO/SB/44 is also submitted herewith.

Applicants do not believe that any fees are due with the filing as the error in the claims was incurred by the USPTO. However, should any fees be required by this request, the Commissioner is hereby authorized to charge Deposit Account 19-4293.

Respectfully submitted,

Date: 12-7-05



Harold H. Fox  
Reg. No. 41,498

Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
Washington, DC 20036-1795  
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DEC 12 2005

## UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 6,929,936 B1

APPLICATION NO.: 09/462,911

ISSUE DATE : August 16, 2005

INVENTOR(S) : Xavier Rouau et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 15, line 42, insert --and,-- after "galactose oxidase" and before "as a second component."

Column 16, line 20, cancel text "with the composition of claim 1"

### MAILING ADDRESS OF SENDER (Please do not use customer number below):

Steptoe & Johnson LLP  
1330 Connecticut Avenue, NW  
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This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DEC 12 2005

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



In re the application of: Rouau, Xavier et al.

Examiner: Meller, Michael V.

Serial No. 09/462,911

Group Art Unit: 1654

Filed : May 15, 2000

Docket No.: 14923.0017

For: *A Composition Comprising an Enzyme Having  
Galactose Oxidase Activity and Use Thereof*

**REPLY TO ACTION DATED SEPTEMBER 7, 2004**

United States Patent and Trademark Office  
220 20<sup>th</sup> Street South  
Customer Window  
**Mail Stop AF**  
Crystal Plaza Two, Lobby, Room 1B03  
Arlington VA 22202

Sir:

In response to the final Office Action mailed September 7, 2004, Applicants submit the following remarks and amendments in this request for reconsideration.

DEC 12 2005

### **CLAIM AMENDMENTS**

#### **Claims 1-32 (Canceled)**

33. **(Currently Amended)** A flour dough improving composition comprising, as a first component, a galactose oxidase (EC 1.1.3.9) and, as a second component: (i) ~~an oxidizable substrate for the galactose oxidase which is~~ at least one of a galactan, a galactose oligomer or a galactose dimer, (ii) ~~an oxidizable substrate for the galactose oxidase which is at least one of a galactan, a galactose oligomer or a galactose dimer, and an enzyme which is capable of hydrolysing or otherwise degrading a compound into a substrate for the galactose oxidase a~~ galactanase, or (iii) ~~an enzyme which is capable of hydrolysing or otherwise degrading a compound into a substrate for the galactose oxidase~~ galactanase; and flour.

34. **(Previously Presented)** A composition according to claim 33 wherein the galactose oxidase is derived from an organism which is selected from the group consisting of a plant species, a fungal species and a bacterial species.

#### **Claims 35-40. (Canceled)**

41. **(Previously Presented)** A composition according to claim 33 which comprises a further enzyme component including a cellulase, a starch degrading enzyme, a lipase or a protease.

42. **(Currently Amended)** A composition according to any of claims 33 or ~~35- 41~~ further comprising a non-enzymic dough additive compound.

43. **(Previously Presented)** A composition according to claim 33 wherein the amount of galactose oxidase is in the range of 1 to 10,000 units per g.

44. **(Withdrawn)** A method of preparing a flour dough comprising adding to the dough an amount of the composition of any one of claims 33, ~~or 35- 41~~ or 54-58 which is sufficient to

obtain an amount of galactose oxidase activity in the dough which is in the range of 1 to 10,000 units per kg of flour.

45. **(Withdrawn)** A method according to claim 44 wherein the flour dough is a noodle dough.

46. **(Withdrawn)** A method according to claim 45 wherein the flour dough is an alimentary paste dough.

47. **(Withdrawn)** A method of preparing a bakery product, comprising baking the flour dough obtained by the method of claim 44.

48. **(Withdrawn)** A method ~~of using~~ preparing a dough product comprising adding the composition of ~~claim 33~~ any one of claims 33, 41 or 54-58 to dough ingredients, dough additives, a dough or a combination thereof.

49. **(Withdrawn)** A method according to claim 48, wherein the composition comprises a further enzyme component which includes a cellulase, a starch degrading enzyme, a lipase or a protease.

50. **(Withdrawn)** A method according to claim 48 or 49, wherein the composition further comprises a non-enzymic dough additive compound.

51. **(Withdrawn)** A method according to claim 48 or 49, wherein the galactose oxidase in the composition added to the dough ingredients, dough additives or the dough is substantially free of other enzyme activities.

52. **(Withdrawn)** A method according to claim 48, wherein the galactose oxidase is in the form of a crude enzyme preparation.

Claim 53. **(Canceled)**

Applicant : Rouau, Xavier et al.  
Serial No. : 09/462,911  
Filed : May 15, 2000  
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Attorney's Docket No.: 14923.0017

54. (New) The composition according to claim 33, wherein the second component is a galactan.

55. (New) The composition according to claim 33, wherein the second component is a galactose oligomer.

56. (New) The composition according to claim 33, wherein the second component is a galactose dimer.

57. (New) The composition according to claim 33, wherein the second component is a galactose oligomer and a galactanase.

58. (New) The composition according to claim 33, wherein the second component is galactanase.

### **REMARKS**

Claims 24-53 are pending in the application. Claims 24-27, 30, 31, 38, 39, and 44-52 were previously withdrawn. Claims 24-32, 35-40, and 53 have been canceled without prejudice. Claims 33, 42, 44 and 48 have been amended and new claims 54-58 have been added. Support for the new claims and claim amendments may be found throughout the specification, including the claims as originally filed. No new matter has been added. No new issues have been raised.

Amendments of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections. The amendments to the claims are being made solely to expedite prosecution of the present application. Applicants reserve the right to further prosecute claims drawn to all subject matter disclosed in the instant patent application or in a continuation hereof.

Applicants respectfully request that previously withdrawn claims 44-52 be rejoined as they are drawn to methods of preparing flour dough using the composition of claim 33 and its dependent claims thereof. As stated in the MPEP 821.04, "if applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims which depend from or otherwise include all the limitations of the allowable product claim will be rejoined."

The Examiner's remarks in the last Office Action are addressed below. It is believed that the claims and all dependent claims, taken in light of the remarks made herein, meet all criteria for patentability.

### **CLAIM REJECTIONS**

#### ***Rejection of claims under 35 U.S.C. §112, first paragraph***

The Examiner has rejected claims 28, 29, 32-37, 40-43, and 53 "because the specification, while being enabling for a galactanase, does not reasonably provide enablement for any and all enzymes which is capable of converting a compound into a substrate for the galactose oxidase" (page 2 of the Office Action). Applicants respectfully traverse this rejection.

While Applicants continue to believe the specification adequately enables the previously presented claims, the claims have been amended to expedite prosecution. In the interest of advancing the claims to allowance, claims 28, 29, 32, 35-37, 40, and 53 have been cancelled

without prejudice and claim 33 and its dependent claims have been amended to overcome this rejection.

Thus, Applicants respectfully request reconsideration and withdrawal of this rejection.

***Rejection of claims under 35 U.S.C. §112, second paragraph***

The Examiner has also rejected claims 28, 29, 32-37, 40-43 and 53 "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regards as the invention" (page 4 of the Office Action). The Examiner has further suggested that "[i]t might be clearer if applicant defined the 'compound' as a galactan, galactose oligomer or a galactose dimer" (page 5 of the Office Action). Applicants respectfully traverse this rejection.

In the interest of advancing the claims to allowance, claims 28, 29, 32, 35-37, 40, and 53 have been cancelled without prejudice and claim 33 and its dependent claims have been amended to overcome this rejection. Specifically, Applicants have amended claim 33 to recite "galactanase" instead of "an enzyme which is capable of converting a compound into a substrate for the galactose oxidase" and to recite the three compounds: galactan, galactose oligomer or a galactose dimer; as suggested by the Examiner. Applicants believe that amendments made herein fully overcome and obviate the stated grounds for rejection of said claims.

**Rejection of claims under 35 U.S.C. §103**

The Examiner has rejected claims 28, 29, 32-37, 40-43 and 53 "as being unpatentable over Beggs et al., Goers et al. '840, Goers et al. '973, in view of WO 93/25239, Jung et al. (abstract), Aoda et al., Wirth et al. (abstract), Morishita et al., or Baichwal et al. The Examiner states that "Beggs et al. (col. 5), Goers et al. '840 (col. 19), Goers et al. '973 (col. 21) each teach that galactose oxidase is known to be used in pharmaceutical compositions" (see page 5 of the Office Action). Additionally, "WO 93/25239 (page 6), Jung et al. (abstract), Aoda et al. (col. 3), Wirth et al. (abstract), Morishita et al. (col. 11), or Baichwal et al. (col. 1) teach that g[a]lactans are known in the art to be used in pharmaceutical compositions" (page 5 of the Office Action).

The Examiner alleges that "the invention is obvious since the two components are both known in the art to be used for the same purpose, namely pharmaceutical purposes." The Examiner rejects Applicants' argument that "the references do not teach a flour dough improving



composition" as "[t]he art does not have to teach the intended use of the claimed product."

"Since the claims are drawn to the product and not the method of using the product, the claimed invention is properly rejected" (page 6 of the Office Action).

Applicants respectfully traverse this rejection.

Claims 28, 29, 32, 35-37, 40, and 53 have been cancelled without prejudice, rendering the instant rejection moot with respect to these claims. Claim 33, as amended, is the only remaining independent claim and claims 34, 41-43, and 54-58 are dependent therefrom.

Applicants have discovered a flour dough improving composition including, as a first component, **a galactose oxidase (EC 1.1.3.9), a second component, and flour**. See independent claim 33.

The Beggs et al. reference teaches therapeutic agents including a combination of a galactose oxidase and a peroxidase and in particular, teaches the use of such therapeutic agents in dental care. Goers et al. '840 and Goers et al. '973 references each teach antibody systems capable of delivering therapeutic agents to target site in vivo. Both references also teach that enzymes (e.g. galactose oxidase) that catalyze substrate modification with the production of cytotoxic by-products may be used as therapeutic agents. The Beggs et al., Goers et al. '840 and Goers et al. '973 references do not teach, suggest or motivate a person skilled in the art to make or use **a composition including galactose oxidase, a second component, and flour**.

The WO 93/25239 reference teaches the synthesis and methods of use of therapeutic agents targeted to cells. In particular, this reference teaches conjugates of arabinogalactans with therapeutic agents such as ARA-AMP or WR2721 as well as derivatives of arabinogalactans. Further, this reference teaches that galactose oxidase treatment of arabinogalactan can be used to create aldehyde groups. WO 93/25239 does not teach, suggest or motivate a person skilled in the art to make or use **a composition including galactose oxidase, a second component, and flour**.

Jung et al. (abstract) teaches the synthesis and use of therapeutic agents targeted to cells especially hepatocytes. The Aoda et al. reference teaches pharmaceutical vehicles including a water-soluble, polymeric substance such as galactan. The Wirth et al. reference teaches pharmaceutical salts such as galactan sulphate. The Morishita et al. reference teaches pharmaceutical preparations which have excellent absorption properties for use in rectal or vaginal administration. The Morishita et al. reference further teaches therapeutic compositions

which include chelating agents such as galactan. Lastly, the Baichwal et al. reference teaches controlled release pharmaceuticals. Accordingly, the WO 93/25239, Jung et al. (abstract), Wirth et al. (abstract), Morishita et al., and Baichwal et al. references do not provide any teaching, suggestion or motivation to a person skilled in the art, to make or use **a composition including galactose oxidase, a second component, and flour.**

Moreover, even if all the elements of a claim are taught by a combination of references, (which Applicants do not concede to be the case here), there is no *prima facie* case of obviousness in the absence of motivation to combine the references. MPEP 2143.01, citing *In re Rouffet*, 194 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998).

None of the above-cited 7 references, alone or in combination, teach or suggest a composition including galactose oxidase, a second component and flour. Accordingly, claim 33 and claims that depend therefrom are patentable over the above-cited 7 references. Applicants respectfully request the withdrawal of the rejection.

### CONCLUSION

Allowance of the claims is respectfully requested. Please apply any other charges or credits to Deposit Account **19-4293**.

If, for any reason, a telephonic conference with the Applicant would be helpful in expediting prosecution of the instant application, the Examiner is invited to call Applicants' Attorney at the telephone number provided below.

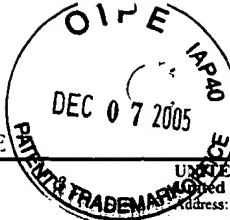
Respectfully submitted,

Date: December 6, 2004



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## NOTICE OF ALLOWANCE AND FEE(S) DUE

27890 7590 03/02/2005  
STEPTOE & JOHNSON LLP  
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WASHINGTON, DC 20036

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STEPTOE &amp; JOHNSON, LLP

EXAMINER

MELLER, MICHAEL V

ART UNIT

PAPER NUMBER

1654

DATE MAILED: 03/02/2005

14923.0017

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,911	02/15/2000	XAVIER ROUAU	64321.000013	5645

TITLE OF INVENTION: COMPOSITION COMPRISING AN ENZYME HAVING GALACTOSE OXIDASE ACTIVITY AND USE THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$0	\$1400	06/02/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

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## I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

DEC 12 2005

Date: 6/2/05  
Action Due: Issue Fee Due  
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27890 7590 03/02/2005

STEPTOE & JOHNSON LLP  
 1330 CONNECTICUT AVENUE, N.W.  
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(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,911	02/15/2000	XAVIER ROUAU	54321.000013	5645

TITLE OF INVENTION: COMPOSITION COMPRISING AN ENZYME HAVING GALACTOSE OXIDASE ACTIVITY AND USE THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$0	\$1400	06/02/2005

EXAMINER	ART UNIT	CLASS-SUBCLASS
MELLER, MICHAEL V	1654	435-190000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies \_\_\_\_\_

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number \_\_\_\_\_ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27.
- ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature \_\_\_\_\_

Date \_\_\_\_\_

Typed or printed name \_\_\_\_\_

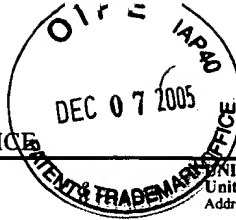
Registration No. \_\_\_\_\_

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,911	02/15/2000	XAVIER ROUAU	54321.000013	5645

27890 7590 03/02/2005

STEPTOE & JOHNSON LLP  
1330 CONNECTICUT AVENUE, N.W.  
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EXAMINER
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MELLER, MICHAEL V

ART UNIT	PAPER NUMBER
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1654

DATE MAILED: 03/02/2005

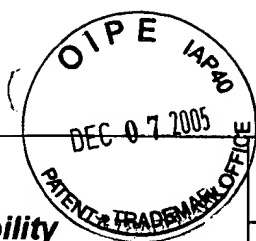
## Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



# Notice of Allowability

Application No.

09/462,911

Examiner

Michael V. Meller

Applicant(s)

ROUAU ET AL.

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed 2/3/2005.
2. ☒ The allowed claim(s) is/are 33,34,41-52 and 54-58.
3. ☒ The drawings filed on 11 March 2000 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |   |  |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                    |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance   |
|   | 9. <input type="checkbox"/> Other _____.   |

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Art Unit: 1654

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Harold Fox on 2/24/2005.

The application has been amended as follows:

IN THE CLAIMS:

Claims 44-52 which were withdrawn are now under consideration.

Claim 33, line 2, delete, "component , " and insert, ---component---, and delete "(EC 1.1.3.9) and ", and delete "(i)", and insert, ---(a)---, line 4, delete, "(ii)" and insert, ---(b)---, line 7, delete, "(iii)" and insert, ---(c)---, line 8, delete, "flour" and insert, ---as a third component, flour---.

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Claim 41, lines 1-2, delete, "comprises a further enzyme component including"  
and insert, ---further comprises---

Claim 42, line 1, delete, "any of".

Claim 43, insert, ---the--- after, "the amount of".

Claim 44, line 2, delete, "any one of claims 33, or 35-41 or 54-58" and insert, ---  
claim 33---

Claim 47, line 2, insert at the end of the claim, ---with the composition of claim  
33---

Claim 48, line 1, delete, "preparing" and insert, ---of preparing---, line 2, delete,  
"any one of claims 33, 41 or 54-58" and insert, ---claim 33---

Claim 49, lines 1-2, delete, "comprises a further enzyme component which  
includes" and insert, ---further comprises---

The following is an examiner's statement of reasons for allowance: the  
amendment adding in flour as a component in the claimed composition makes the claim



allowable. No art can be found which anticipates nor renders obvious the claimed composition as now claimed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 571-272-0967. The examiner can normally be reached on Monday thru Thursday: 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Michael V. Meller

Application/Control Number: 09/462,911  
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Page 5

MVM

Primary Examiner  
Art Unit 1654

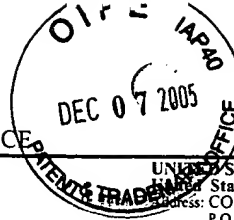
A handwritten signature in black ink, appearing to read 'M. Meller', followed by a long horizontal line extending to the right.

**MICHAEL MELLER**  
**PRIMARY EXAMINER**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/462,911	02/15/2000	XAVIER ROUAU	54321.000013 <b>14923.0017</b>	5645
27890 7590 05/13/2005 STEPTOE & JOHNSON LLP 1330 CONNECTICUT AVENUE, N.W. WASHINGTON, DC 20036			EXAMINER MELLER, MICHAEL V	
			ART UNIT 1654	PAPER NUMBER

RECEIVED

MAY 16 2005

STEPTOE & JOHNSON, LLP

DATE MAILED: 05/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

DEC 12 2005

Date: 6/2/05

Action Due: Issue Fee / Correspondence Due  
✓ *nm*

**SUPPLEMENTAL EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Harold Fox on 5/11/2005.

The application has been amended as follows:

**IN THE CLAIMS:**

In claim 47, delete, "with the composition of claim 33".

The restriction requirement of record is withdrawn.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael V. Meller whose telephone number is 571-272-0967. The examiner can normally be reached on Monday thru Thursday: 9:30am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bruce Campell can be reached on 571-272-0974. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael V. Meller  
Primary Examiner  
Art Unit 1654

MVM